

**EXHIBIT 98  
REDACTED**

## PRD: Real-time YM with Header Container

Google confidential and privileged  
DRAFT



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Product: DRX Sellside

### Summary

Publisher trials of 'header tags' have taken off in the past month with new articles popping up weekly. One of the core values of DRX has been the real time nature of AdX competing with both direct and remnant line items. In contrast other demand sources, such as buyers and exchanges, instead compete using an average value. The difference between the average CPM and the real time value of a query/cookie could be additional yield.

With publishers constantly looking for incremental yield, the potential uplift from real time pricing has been quite attractive. Header bidding does offer publishers a way to get more accuracy in estimated yield from their partners but it comes at the expense of both additional latency for the user as well as complexity with page and DFP set-ups with many line items mapping to small CPM increments.

We have broken the proposal into multiple components as each has more multiple options in which they could be solved. Each section will cover the recommended option as well as top alternatives.

Summary of project components involved in this proposal

- **Data collection**
- **Serving & tag changes**
- **Configuration**
  - Buyer setup and configuration
  - Buyer lineitems

**Commented [1]:** The document already assumes that the proposed solution is the best form of response... while i am sure that would be the case. It would be helpful to layout even if briefly - before we get into all the details - what are the different options of response, what are their pros and cons and why is this the preferred solution - which is then detailed further. at least 3 modes of response i can think of are  
1) Do nothing  
2) Implement our own Header Bidding (which this is i guess)  
3) Modify one of our other existing solutions (e.g., RTB)

- Mediation Group UI
- **Terms & Policies**
- **Optimization**
  - Real-time price signals
  - First-price auction of buyer bids
  - Adjustments on estimated bids
- **Logging & Reporting**
  - Performance reports (bids/wins/revenue/eCPM)
  - CPM/yield differential reports
  - Comparison of 'estimated' yield vs real yield
- **Moving beyond options in market**

The main proposal covers the modification of GPT to call selected buyers/exchanges (referred to as Buyers going forward) and ask for their predicted CPM bucket for the query. GPT would include a 'container' that would call the selected Buyer tags and obtain their predicted clearing price. To drastically cut down on the number of line items used for current header bidding implementations this proposal would use a single LI for each Buyer and inventory targeting combination. DFP would pass the Buyer's predicted CPM into the line item rather than using existing key value techniques. Publishers would be able to set up and configure the Buyers in DFP using an interface similar to DFP Mediation. New reporting options would be added showing bidding frequency, average CPMs and predicted revenue based on Buyer response. To keep the Buyers honest about their response new month end reports would be available that can be compared to the revenue reports from the Buyers themselves. Pubs would be able to report the degree of error in CPMs and revenue to Google in an automated manner which would then be used to adjust CPMs from the Buyer for future queries.

These solutions together would provide an alternative to the many Header Bidding offerings in market and also ensure that Google gets to compete for all impressions fairly.

Summary

Summary of Competitive Advantage of Google's offering

Background

What is header bidding?

Why are publishers using it?

Challenges of header bidding

Benefits to publishers

Impact to Google from usage of 3rd party HB solutions

Competitor header bidding solutions

RTB vs Header Bidding

Google Value Proposition

Benefits to Google of new header bidding solution

Google competitive advantage details vs existing HB offerings

Proposal